	Application No.	Applicant(s)
Notice of Allowability	10/086,387	DMITRIEV, MIKHAIL
	Examiner	Art Unit
	VAN H. NGUYEN	2194

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--
All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *Applicant's amendments and supporting arguments filed 10/27/05*.

2. ☒ The allowed claim(s) is/are *1, 3-6, 17, 19-22, and 30 (now renumbered as 1-11)*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None   of the:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☒ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

        1) ☒ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____ .

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)
1. ☐ Notice of References Cited (PTO-892)
2. ☒ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____ .

WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER

EXAMINER'S AMENDMENT & REASONS FOR ALLOWANCE

I. EXAMINER'S AMENDMENT:

1.   An examiner's amendment to the record appears below. Should the changes and/or

additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR

1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the

payment of the issue fee.

2.   Authorization for this examiner's amendment was given in a telephone interview with

Mr. Philip McKay (Reg. No.38, 966) on January 18, 2006.

3.   **The application has been amended as follows:**

In the Claims:

A. **All previous copies of claims 1, 17, and 30 have been replaced with the following**

clean copy of claims 1, 17, and 30 as amended by the Examiner's amendment:

Claim 1. A computer-implemented method for loading methods into a virtual machine, the

methods contained in one or more classes, the method including:

recursively scanning through application code beginning at an application entrypoint to

determine which methods may be called and the classes to which they correspond;

wherein said recursively scanning includes:

finding all methods referenced in said application code; and

finding all methods referenced in methods referenced in said application code;

generating a method usage map having an identifier corresponding to each referenced method organized under its corresponding class;

storing identifiers corresponding to all said methods referenced in said application code and all said methods referenced in methods referenced in said application code in said method usage map organized by classes;

consulting said method usage map upon execution of the virtual machine; and

selectively loading only those methods contained in said method usage map into memory in the virtual machine.

Claim 17. An apparatus for loading methods into a virtual machine, the methods contained in one or more classes, the apparatus including:

means for recursively scanning through application code beginning at an application entrypoint to determine which methods may be called and the classes to which they correspond;

wherein said recursively scanning includes:

finding all methods referenced in said application code; and

finding all methods referenced in methods referenced in said application code;

means for generating a method usage map having an identifier corresponding to each referenced method organized under its corresponding class;

means for storing identifiers corresponding to all said methods referenced in said

application code and all said methods referenced in methods referenced in said application code

in said method usage map organized by classes;

means for consulting said method usage map upon execution of the virtual machine; and

means for selectively loading only those methods contained in said method usage map

into memory in the virtual machine.

Claim 30. A program storage device readable by a machine, tangibly embodying a program of

instructions executable by the machine to perform a method for loading methods into a virtual

machine, the methods contained in one or more classes, the method including:

recursively scanning through application code beginning at an application entrypoint to

determine which methods may be called and the classes to which they correspond;

wherein said recursively scanning includes:

finding all methods referenced in said application code; and

finding all methods referenced in methods referenced in said application code;

generating a method usage map having an identifier corresponding to each referenced

method organized under its corresponding class;

storing identifiers corresponding to all said methods referenced in said application code

and all said methods referenced in methods referenced in said application code in said method

usage map organized by classes;

consulting said method usage map upon execution of the virtual machine; and

selectively loading only those methods contained in said method usage map into memory

in the virtual machine.

B. Claims 7, 9-12, 23, 25-28, and 31 have been cancelled.

II. REASONS FOR ALLOWANCE:

1.   The following is an examiner's statement of reasons for allowance:

2.   The prior art does not expressly teach or render obvious the invention as recited

in independent claims 1, 17, and 30 as amended above.

3.   Kramskoy et al. (U.S. 6,901,587) discloses *a computer-implemented method for loading*

methods into a virtual machine, the methods contained in one or more classes, the method

including: recursively scanning through application code beginning at an application

entrypoint to determine which methods may be called and the classes to which they correspond;

wherein said recursively scanning includes: finding all methods referenced in said application

code; and finding all methods referenced in methods referenced in said application code as

described in independent claims 1, 17, and 30 [see figs. A1-3; cols.50, 61, 78, and 81-82].

However, the claimed *"generating a method usage map having an identifier corresponding to*

each referenced method organized under its corresponding class; storing identifiers

corresponding to all said methods referenced in said application code and all said methods

referenced in methods referenced in said application code in said method usage map organized by classes; consulting said method usage map upon execution of the virtual machine; and selectively loading only those methods contained in said method usage map into memory in the virtual machine", when taken in the context of the claims as a whole, was not uncovered in the prior art teachings.

4.   Nor were references uncovered that would have provided a basis of evidence for asserting a motivation that one of ordinary skill level in the art at the time the invention was made, knowing of a computer-implemented method for loading methods into a virtual machine in this specific environment, would have integrated or modified to teach the computer-implemented method for loading methods into a virtual machine with the specific features as recited in the context of independent claims 1, 17, and 30.

5.   Dependent claims are allowed as they depend upon allowable independent claims.

6.   Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

<div align="center">CONTACT INFORMATION</div>

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VAN H. NGUYEN whose telephone number is (571) 272-3765. The examiner can normally be reached on Monday-Thursday from 8:30AM - 6:00PM. The examiner can also be reached on alternative Friday.
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, WILLIAM THOMSON can be reached at (571) 272-3718.
The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

      Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

      For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to:
Commissioner for patents
P O Box 1450
Alexandria, VA 22313-1450

VHN

WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER